



# Why I am not an Anti-Haecceitist

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Received: 22 July 2022 / Accepted: 22 December 2022  
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## Abstract

In this paper I argue that if the Identity of Indiscernibles is not necessarily true, then Haecceitism ensues—where Haecceitism is the view that there are maximal possibilities that include all the same qualitative possibilities, and yet differ with respect to the non-qualitative possibilities they include. This goes against the common intuition that Anti-Haecceitism is compatible with the Identity of Indiscernibles being only contingently true. My argument is interesting in many respects. First, it shows that in *any* modal framework there is a connection between the number of worldbound ordinary spatio-temporal objects, and the number of overall possibilities. Second, it has repercussions for the tenability of some philosophical positions, like Generalism, which is usually interpreted as entailing Anti-Haecceitism while at the same time being compatible with the claim that the Identity of Indiscernibles is not necessarily true. If I am correct, Generalism and similar philosophical accounts turn out to be inconsistent. Finally, it provides a strong argument for Haecceitism, given that the majority of authors today find counterexamples to the Identity of Indiscernibles extremely convincing, and many philosophical positions have been and continue being criticised on the basis of their commitment to the Identity of Indiscernibles. The paper is structured as follows: I introduce Haecceitism and the Identity of Indiscernibles in Sects. 1 and 2 respectively. Drawing on a result from the Philosophy of Quantum Mechanics, which I survey in Sect. 3, I give my main argument in Sect. 4. Finally, I discuss some implications in Sect. 5.

**Keywords** Haecceitism · Identity of indiscernibles · Metaphysics of identity · Possible worlds

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## 1 Haecceitism

If you believe that the world could have been exactly as it is, except for the fact that I could have had all the qualitative properties you actually have and you could have had all the qualitative properties I actually have, then you are a Haecceitist. Haecceitism holds that there are ways the world could have been that differ from the way the world actually is only with respect to some non-qualitative properties or facts.<sup>1</sup> Non-qualitative properties are properties which depend, in one way or other, on the identity of some specific individual. ‘Being Barack Obama’ or ‘Standing next to Joe Biden’ are common examples of non-qualitative properties. Qualitative properties, on the other hand, do not depend on any individual: ‘Being a brother’, ‘Being extended’ and ‘Being in love with someone’ are all qualitative properties.<sup>2</sup> Similarly, we take the fact [that someone is tall] as qualitative, and the fact [that Boris Johnson is tall] as non-qualitative.

The same distinction applies to possibilities. Possibilities are commonly understood as ways the world could be/could have been. Some authors identify the notion of *possibility* with that of *possible world*, while others hold that one and the same possible world can represent distinct possibilities. (See Lewis 1986, pp. 230–231.) Here I don’t need to decide on this issue, and so I will ignore whether possibilities are possible worlds.

We can distinguish between *maximal* and *non-maximal* possibilities: maximal possibilities are *total ways* the world could have been, while non-maximal possibilities are *less than total ways* the world could have been. (For elaboration, see Stalnaker 1984.) For instance, the possibility *that Biden lost the election* is non-maximal, for it tells us nothing about the world apart from what happened to Joe Biden, and perhaps some other facts that follow from his electoral loss.

A possibility is qualitative when it does not depend on any specific individuals, and non-qualitative otherwise. We say that the possibility *that human beings exist* is qualitative, while the possibility *that Donald Trump was a songwriter* is non-qualitative since it depends on one specific individual, namely Donald Trump. Finally, we say that some possibilities *include* other possibilities, and that a maximal possibility includes both qualitative and non-qualitative possibilities. Cowling (2017, p. 4172) notes that there are different ways to understand the relation of inclusion between possibilities. Those who believe that possibilities are propositions are likely to understand inclusion as an instance of entailment, while those who think of possibilities as sets of propositions usually understand inclusion in a set-theoretical way. (I will remain neutral on how we should understand the relation of inclusion.) An example: the possibility represented by the actual world is by definition maximal, and includes both qualitative possibilities, like the possibility *that atoms are composed of protons*, and

<sup>1</sup> For discussion, see: Adams (1979), Cowling (2012, 2022), and Lewis (1986).

<sup>2</sup> The jury is still out on how to define qualitative and non-qualitative properties. Rodríguez-Pereyra (2006), for instance, holds that non-qualitative properties are those depending on the *identity* of some specific individuals, while Hawley (2009) treats them as properties depending on the *existence* of some specific individuals. For my purposes, an intuitive understanding of qualitative and non-qualitative properties will suffice.

non-qualitative ones, like the possibility *that Hillary Clinton lost an election against Donald Trump*.

With this in mind and following Cowling (2017, p. 4172), we define Haecceitism as follows:

**Haecceitism:** There are maximal possibilities that include all the same qualitative possibilities, and yet differ with respect to the non-qualitative possibilities they include.

I will argue that Haecceitism so defined follows from the thesis that the Identity of Indiscernibles, understood as the view that no two distinct ordinary spatio-temporal objects can agree with respect to all their qualitative properties, is not necessarily true.

## 2 The Identity of Indiscernibles

The Identity of Indiscernibles (henceforth PII) holds that qualitative indiscernibility is sufficient for numerical identity. We say that entities  $x$  and  $y$  are qualitatively indiscernible whenever they agree with respect to all their qualitative properties. One way to state PII is as follows:

**Identity of Indiscernibles:** Qualitatively indiscernible entities are numerically identical.

Restricting the range of properties over which we take PII to quantify gives rise to distinct versions of the principle. We can, say, focus on spatio-temporal properties and understand PII as the thesis that no two entities can agree with respect to all their spatio-temporal properties. Or we may focus on intrinsic properties and interpret PII as holding that no two entities can agree with respect to all their intrinsic properties.

In line with the literature, I understand PII as restricted to qualitative properties only, subscribing to Strawson's (1959, p. 120) motto that "[...] in the only form in which it is worth discussing, [PII holds that] it is necessarily true that there exists, for every individual, some description in purely universal, or general, terms, such that only that individual answers to that description". (This account is challenged in Rodriguez-Pereyra 2006.) In particular, in what follows I will focus on a version of the Identity of Indiscernibles restricted to ordinary spatio-temporal objects, which I call PII-O:

**PII-O:** Qualitatively indiscernible ordinary spatio-temporal objects are numerically identical.

For a lack of better terminology, I use 'ordinary spatio-temporal objects' to indicate worldbound spatio-temporal individuals (like tables and chairs) that are neither worlds nor possibilities.<sup>3</sup>

Now, it is believed that PII-O is independent from Haecceitism, in the sense that both PII-O and its negation are compatible with both Haecceitism and Anti-Haecceitism.

<sup>3</sup> The qualification 'ordinary' is meant to exclude black holes, quarks, etc. as well as alien *possibilia*.

This is because, arguably, facts about the identity of ordinary spatio-temporal objects do not have direct bearing on facts about the identity of possibilities. To explain. Suppose PII-O is necessarily true. It follows that in the actual world there are no two ordinary spatio-temporal objects that share all their qualitative properties. In particular, you and I differ with respect to at least some qualitative property. This alone doesn't seem to commit you to the fact that I could have had all the qualitative properties you actually have and you could have had all the qualitative properties I actually have (Haeccetism), nor to the fact that I could have never had all the qualitative properties you actually have and you could have never had all the qualitative properties I actually have (Anti-Haeccetism). Similarly, suppose PII-O is not necessarily true. Then there is a world where there are two indiscernible but distinct objects. For vividness, take Lewis's (1986, pp. 230–231) world with two qualitatively indiscernible twins. Are you bound, by the existence of this world alone, to hold that the indiscernible twins could have swapped their qualitative role? It doesn't seem so. Lewis claims it is plausible that his twins could have swapped their role: however, he gives no argument for why this is the case. He relies on his intuitions, which happen to be in line with Haeccetism. However, there is nothing, on the face of it, that prevents you from holding the contrary intuition: that it would have been impossible for the twins to swap their qualitative roles.

In what follows I want to argue against the intuition that PII-O and Haeccetism are independent theses. In particular, I will argue that if PII-O is not necessarily true, then Haeccetism ensues. And by the contrapositive, that if Anti-Haeccetism is true then PII-O is necessarily true. This, we will see, is interesting in many respects. First, it shows that there is a connection between the identity of ordinary spatio-temporal objects and the identity of possibilities. Second, it exposes a number of authors that have denied both PII-O and Haeccetism as holding on to an overall inconsistent position (one notable example is David Armstrong), and puts pressure on some accounts, like Generalism, which are commonly understood to entail Anti-Haeccetism while remaining neutral on the status of PII-O. Third, it gives the Haeccetist a very strong argument in favour of their own account. There are only few authors, in fact, that still defend PII-O as a metaphysically necessary truth.<sup>4</sup>

Before presenting my main argument, however, I will quickly discuss a view in Philosophy of Physics, on which I will draw in Sect. 4.

### 3 Indiscernibility and non-individuality

There is a famous view in the Philosophy of Quantum Mechanics, according to which indistinguishable particles in certain states are non-individuals. Loosely speaking, a non-individual is an entity to which identity does not apply: if  $x$  is a non-individual, then sentences like ' $x$  is self-identical' and ' $x$  is not identical to itself' are meaningless. Similarly, if  $x$  and  $y$  are non-individuals then sentences like ' $x$  is identical to  $y$ ' and

<sup>4</sup> Important counterexamples to PII-O include: Adams (1979), Ayer (1965), Black (1952), Strawson (1959), and Wüthrich (2009). See Muller (2015) for a detailed discussion.

‘ $x$  is distinct from  $y$ ’ are meaningless too. More formally, we say that if ‘ $x$ ’ refers to a non-individual, then ‘ $x$ ’ cannot meaningfully flank any identity symbol.<sup>5</sup>

The following argument shows how we can conclude that some entities are non-individuals by considering the relation between two scenarios that differ solely with respect to *which* entity is *which*. The argument goes as follows.

Let  $\mathbb{C}1$  be a configuration with only two indistinguishable elementary particles  $x$  and  $y$  in different energy states:  $\mathbb{E}1$  and  $\mathbb{E}2$  respectively.<sup>6</sup> And let  $\mathbb{C}2$  be a configuration disagreeing with  $\mathbb{C}1$  only with respect to which particle is in  $\mathbb{E}1$  and which particle is in  $\mathbb{E}2$ . We say that  $\mathbb{C}2$  is a permutation of  $\mathbb{C}1$ . Now, either:

- (1)  $\mathbb{C}2$  is the same as  $\mathbb{C}1$ , or
- (2)  $\mathbb{C}2$  is distinct from  $\mathbb{C}1$ .

Since by assumption  $x$  and  $y$  are indistinguishable, they are subject to the so called Indistinguishability Postulate:

**Indistinguishability Postulate:** There is no way, even in principle, to distinguish states that differ only by a permutation of their (relevant) particles.

Observe that according to the Received View of Quantum Mechanics, championed among others by French (1989, p. 154), the Indistinguishability Postulate entails that  $\mathbb{C}1$  and  $\mathbb{C}2$  are the same configuration, and so it rules out (2).

Suppose now that  $x$  and  $y$  are individuals, that is: entities to which identity applies. It follows that  $\mathbb{C}1$  satisfies the following sentence:

“The particle in state  $\mathbb{E}1$  is distinct from the particle in state  $\mathbb{E}2$ ”,

where the expression “the particle in state  $\mathbb{E}1$ ” is to be understood *de re* (or as a referential description).<sup>7</sup> However, given that  $\mathbb{C}1$  is the same as  $\mathbb{C}2$ ,  $\mathbb{C}1$  also satisfies the sentence:

“The particle in state  $\mathbb{E}1$  is not distinct from the particle in state  $\mathbb{E}2$ ”.

This is because, when understood *de re*, the expression “The particle in state  $\mathbb{E}1$ ” refers to the same individual in both sentences. But by assumption  $\mathbb{C}2$  is a permutation of  $\mathbb{C}1$ , and therefore the particle that is in  $\mathbb{E}1$  according to  $\mathbb{C}1$  is in  $\mathbb{E}2$  according to  $\mathbb{C}2$ . It follows that  $\mathbb{C}1$  satisfies an inconsistent set of sentences, which is a contradiction. The Received View concludes that identity cannot apply to  $x$  and  $y$ , and as a result that  $x$  and  $y$  are non-individuals.

As you can see, the argument concludes that  $x$  and  $y$  are non-individuals by contradiction from the assumption that  $\mathbb{C}1$  and  $\mathbb{C}2$  are the same configuration. In the next Section, I will make use of a similar reasoning in order to show that if PII-O is not necessarily true, then Haecceitism ensues. One notable difference between the above

<sup>5</sup> Lowe (2016) offers a comprehensive discussion of non-individuality. For more about non-individuality in Quantum Mechanics, see Landau & Lifschitz (1959), and Post (1963).

<sup>6</sup> Examples like this are common in Quantum Mechanics. See, among others, French (1989), French & Krause (2006), Saunders (2003), and Berto (2017).

<sup>7</sup> See Donnellan (1966).

argument and my own is that I will not make use of the Indistinguishability Postulate, since I aim at an argument that is as general as possible, and that is independent from the consistency and tenability of the Received View of Quantum Mechanics.

## 4 From PII-O to Haecceitism

Before I present my argument, it will prove useful to review some facts about PII-O in relation to (non-)individuality.

### 4.1 Non-individuals and the Identity of Indiscernibles

Recall that PII-O is the thesis that no two distinct ordinary objects agree with respect to all their qualitative properties. The thesis is usually regimented in a second-order language as:

$$\forall x \forall y (\forall P (Px \leftrightarrow Py) \rightarrow x = y)$$

with  $x$  and  $y$  individual variables, and  $P$  a second-order predicate variable ranging over qualitative properties. (Note: in our case  $x$  and  $y$  range over ordinary spatio-temporal objects only.) Hence, PII-O is false if and only if the sentence:

$$\exists x \exists y (\forall P (Px \leftrightarrow Py) \wedge x \neq y)$$

is true.<sup>8</sup> We read this sentence as: “There are at least two ordinary spatio-temporal objects that are qualitatively indiscernible and yet distinct”. Therefore, we say that PII-O is not a necessary truth if and only if there is a possibility according to which this last formula is true. It is worth stressing this last point. It tells us that in order for a possibility  $\mathbb{P}$  to violate PII-O, the indiscernible ordinary objects  $x$  and  $y$  in  $\mathbb{P}$  must satisfy the formula ‘ $x \neq y$ ’, which means that  $x$  and  $y$  cannot be non-individuals. If they were, in fact, the formula ‘ $x \neq y$ ’ would be meaningless, rendering the entire conjunction unsatisfiable.

### 4.2 The main argument

I want now to show that if PII-O is not necessarily true *then* Haecceitism is true. So let us start by assuming that PII-O is not a necessary truth. It follows that there is a non-empty class of possibilities according to which there are at least two ordinary spatio-temporal objects that are qualitatively indiscernible and yet distinct. Let  $\mathbb{P}1$  be one such possibility, and call two of the indiscernible objects in it Adam and Beth. I assume size is a contingent property of Adam and Beth, and I hold this is an innocent assumption. All the ordinary objects I can think of have their size contingently: for example, I could have been taller, and you could have been shorter. This seems to hold for ordinary objects generally. Then, there is a possibility  $\mathbb{P}2$  according to which Adam and Beth are qualitatively indiscernible and yet distinct, and their size is such

<sup>8</sup> Where again,  $x$  and  $y$  range over ordinary objects and  $P$  ranges over qualitative properties only.

Fig. 1 A representation of  $\mathbb{P}2$

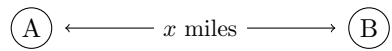
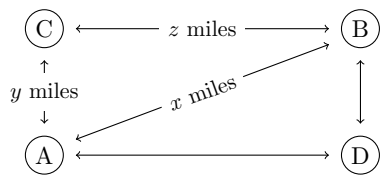


Fig. 2 A representation of  $\mathbb{P}3$



that they do not occupy all the space available.<sup>9</sup> Since Adam and Beth are spatio-temporal objects, they must be at some distance from each other (Fig. 1). A (partial) representation of  $\mathbb{P}2$  is the following:

According to  $\mathbb{P}2$ , Adam and Beth occupy only a small portion of the space available. Therefore, I hold that if  $\mathbb{P}2$  is a genuine possibility, then Adam and Beth could have existed alongside another couple of indiscernible objects, call them Charlie and Dave, and that (1) the distance between Adam and Charlie was the same as the distance between Beth and Dave, (2) the distance between Adam and Beth was different from the distance between Adam and Charlie, (3) the distance between Charlie and Beth was different from the distance between Beth and Adam, and (4) the distance between Adam and Charlie was different from the distance between Charlie and Beth (Fig. 2). We can represent this possibility, which we call  $\mathbb{P}3$ , as follows:

One way  $\mathbb{P}3$  is able to distinguish between Adam and Beth is by means of the non-qualitative property ‘Being  $y$  miles away from Charlie’, which only Adam instantiates. Therefore, according to  $\mathbb{P}3$  there are four qualitatively indiscernible objects and a non-qualitative property that doesn’t depend either on the identity of Adam or on the identity of Beth and distinguishes between Adam and Beth insofar as only one of them instantiates it. From this we conclude that, if PII-O is not necessarily true, then there is a possibility according to which there are at least two indiscernible objects and there is a non-qualitative property that distinguishes them and doesn’t depend on neither of their identities.

Now we can ask whether it could have been the case that it was Dave, and not Charlie, that was  $y$  miles away from Adam.<sup>10</sup> Suppose so (Fig. 3). Then we have  $\mathbb{P}4$ : Is  $\mathbb{P}4$  possible? I think it is, for two reasons. First, I hold that the differences between  $\mathbb{P}3$  and  $\mathbb{P}4$  are not enough to make one of them an impossibility. After all,  $\mathbb{P}3$  and

<sup>9</sup> One might object that Adam and Beth having their size contingently is not enough to conclude that they could have existed and occupied only a small portion of the space available, for it might be the case that it is essential to both Adam and Beth that they can coexist with another qualitatively indiscernible object only if together with it they occupy the entirety of the space available. This is an interesting objection, but one I find implausible. First, remember that Adam and Beth are by definition ordinary objects, and ordinary objects usually don’t have such essential relational spatial properties. So why should Adam and Beth have these properties? This asymmetry should be explained, and I cannot think of any plausible and non ad hoc explanation one could give. Second, remember that  $\mathbb{P}1$  is an arbitrary counterexample to PII-O. Therefore, holding that Adam and Beth have such essential spatial properties entails that there cannot be any counterexample to PII-O where the entire space is not fully occupied, and this flies in the face of the virtually unanimous consensus that alleged counterexamples to PII-O include Black’s (1952) indiscernible spheres. For these reasons, I hold this objection doesn’t go through. I thank an anonymous reviewer for inviting me to elaborate on this point.

<sup>10</sup> Recall that we are still working under the assumption that PII-O is not necessarily true.

Fig. 3 A representation of  $\mathbb{P}4$

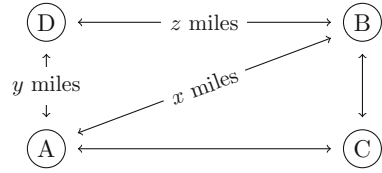
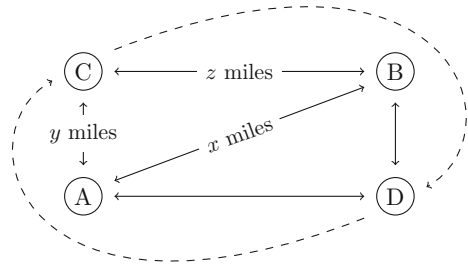


Fig. 4 A representation of  $\mathbb{P}3.5$



$\mathbb{P}4$  have the same number of objects, with the same intrinsic properties, in exactly the same spatial configuration. They only differ with respect to *which* object is *y* miles away from Adam and *which* object is *y* miles away from Beth—and I hold that this is not a good reason to say that  $\mathbb{P}4$  is impossible. For then, what would make  $\mathbb{P}3$  possible? If you think that  $\mathbb{P}3$  is possible and  $\mathbb{P}4$  is not you are committed to the idea that some spatial properties are essential to some (and only some) of our indiscernible objects. After all, in this case it would follow that other things being equal, Dave could not have been in another part of the universe, not already occupied by any other object—an assumption that at best borders on the absurd. Notice that to say that  $\mathbb{P}4$  is possible is not to endorse Haecceitism: for there is no reason, yet, why we should think that  $\mathbb{P}3$  and  $\mathbb{P}4$  are distinct possibilities.

Second, consider again  $\mathbb{P}3$ . I hold that it is not necessary that the objects in  $\mathbb{P}3$  are at rest. That is: we can safely assume that, being ordinary objects, Adam, Beth, Charlie and Dave have their position in space only contingently.<sup>11</sup> Then, it is possible that Charlie and Dave could have been moving around Adam and Beth, at the same speed, along the same orbit. Call this possibility  $\mathbb{P}3.5$  (Fig. 4).

If  $\mathbb{P}3.5$  is possible then for any spatial configuration in which our objects are at some moment of their revolution, there is a possibility such that (1) they are in exactly the same configuration, and (2) they will never be and have never been in any other configurations. (Notice that  $\mathbb{P}3.5$  doesn't need to be *nomologically* possible, only *metaphysically* possible.) In particular: at any moment of Charlie's revolution it is possible that Charlie could have been at that same distance with respect to all the other objects in the world, without having ever moved. (The same holds for Dave.) If this is the case, then we find  $\mathbb{P}4$  among the possibilities generated from  $\mathbb{P}3.5$ . And since I see no way to deny that Charlie and Dave could have been unmoving (notice that to deny this would be to deny that  $\mathbb{P}3.5$  is possible), then it seems that indeed if  $\mathbb{P}3$  is possible, then so must be  $\mathbb{P}4$ .

<sup>11</sup> Like the assumption on the contingency of ordinary objects' size, I hold that the supposition that ordinary objects have their spatial position contingently is innocuous. After all, for example, the Earth could have been closer to the Sun than it actually is.



We conclude that  $\mathbb{P}4$  is possible if  $\mathbb{P}3$  is, and that  $\mathbb{P}3$  is possible if PII-O is not necessarily true (which we have assumed at the start). Now we have two cases:

- (1)  $\mathbb{P}3$  is the same as  $\mathbb{P}4$ , or
- (2)  $\mathbb{P}3$  is distinct from  $\mathbb{P}4$ .

A quick moment's thought reveals that  $\mathbb{P}3$  and  $\mathbb{P}4$  are both *maximal* and *include the same qualitative possibilities*. They in fact represent total ways the world could have been, and agree with respect to all the qualitative possibilities they include: the possibility that some object is  $x$  miles away from some other object, the possibility that some object is  $y$  miles away from some other object, the possibility that all objects are extended, etc. This means that if Anti-Haecceitism is true, then (1) is true.

So assume for *contradiction* that Anti-Haecceitism is true, that is: that (1) holds and  $\mathbb{P}3$  and  $\mathbb{P}4$  are one and the same possibility.<sup>12</sup> Suppose further that Adam, Beth, Charlie and Dave are individuals: that is, entities to which identity applies. Then,  $\mathbb{P}3$  satisfies the sentence:

“The object that is  $y$  miles away from Charlie is distinct from the object that is  $y$  miles away from Dave”,

where the expression “the object that is  $y$  miles away from Charlie” is understood *de re* (or as a referential description). However, since  $\mathbb{P}3$  is the same as  $\mathbb{P}4$ , then  $\mathbb{P}3$  also satisfies the sentence:

“The object that is  $y$  miles away from Charlie is not distinct from the object that is  $y$  miles away from Dave”.

This is because, understood *de re*, the expression “the object that is  $y$  miles away from Charlie” refers to the same individual in both sentences—and since  $\mathbb{P}4$  is nothing more than a permutation of  $\mathbb{P}3$ , the objects that is  $y$  miles away from Charlie according to  $\mathbb{P}3$  is  $y$  miles away from Dave according to  $\mathbb{P}4$ .

Since  $\mathbb{P}3$  satisfies an inconsistent set of sentences it cannot be a possibility, and we have a contradiction. To avoid this, we must conclude that one of our assumptions is false—and since we are reasoning under three assumptions, we only have three ways out of inconsistency. The first is to reject Anti-Haecceitism, which leads us to the conclusion that if PII-O is not necessarily true, then Haecceitism ensues.<sup>13</sup> The second is to reject the assumption that PII-O is not necessarily true. This allows us to conclude that if Anti-Haecceitism holds, then PII-O is necessarily true—which is equivalent, by contraposition, to the claim that if PII-O is not necessarily true, then Haecceitism ensues.

The last possibility is to reject the assumption that Adam, Beth, Charlie and Dave are individuals. This amounts to saying that at least one of our objects is a non-individual, in the sense specified in Sect. 3. However, since the property of ‘Being a

<sup>12</sup> You can see that the assumption of Anti-Haecceitism is doing the same kind of work that the Indistinguishability Postulate did for French (1989) above.

<sup>13</sup> Note that this move is equivalent to rejecting case (1) and accepting (2), according to which  $\mathbb{P}3$  and  $\mathbb{P}4$  are distinct possibilities. But then, since  $\mathbb{P}3$  and  $\mathbb{P}4$  are maximal and include the same qualitative possibilities, we get Haecceitism.

non-individual' doesn't depend on the identity of any specific individual, then if one of our objects has it, all of them must have it—for they are, after all, qualitatively indiscernible. But if this is the case, then Adam and Beth are non-individuals, and  $\mathbb{P}1$  is not a possibility in which we have two *distinct*, in the sense of non-identical, objects. Therefore,  $\mathbb{P}1$  is not a counterexample to PII-O anymore, for it doesn't satisfy the conjunction:

$$\exists x \exists y (\forall P (Px \leftrightarrow Py) \wedge x \neq y).$$

This is because, since identity does not apply to Adam and Beth, we cannot obtain the second conjunct: ' $x \neq y$ '. Therefore, since  $\mathbb{P}1$  was chosen arbitrarily, then PII-O is necessarily true, which contradicts our first assumption. By contradiction, this route leads us once again to the conclusion that if PII-O is not necessarily true, then Haecceitism ensues.

## 5 Philosophical remarks

The argument I presented (henceforth I call it NPH for short) shows that Haecceitism follows from the negation of the necessary truth of PII-O. This is interesting for a number of reasons.

First, NPH makes clear that there is a direct connection between how we consider the identity of worldbound individuals and the number of genuine possibilities. To explain. In the literature on Haecceitism, different versions of the Identity of Indiscernibles are distinguished. One option, which we can call PII-T (for PII-Transworld), holds that no two individuals in the entire logical space can agree with respect to all their qualitative properties. PII-T either rules out the possibility of there being distinct worlds which contain indiscernible individuals, or bounds us to some account of transworld identity. This is because, if PII-T is true and we hold that distinct worlds  $w$  and  $v$  contain indiscernible individuals  $x$  and  $y$ , then PII-T entails that  $w$  and  $v$  overlap, for it entails that  $x$  is the same as  $y$ . (And since  $w$  and  $v$  overlap, we have transworld identity.) It is therefore not surprising that PII-T is not independent from Haecceitism. In the end, Haecceitism is a thesis about transworld identity.<sup>14</sup>

PII-O, on the other hand, only claims that no two objects *in a given world* can be qualitatively indiscernible. In this sense, it is a weaker thesis than PII-T. Furthermore, on the face of it, PII-O doesn't seem to entail any fact about transworld identity. This is why it is so surprising that this version of PII, or better, its negation, entails Haecceitism (which is, once again, a thesis about transworld identity). This tells us that the number of indiscernible objects we take to exist at a given world determines a lower bound for the number of possibilities we have to include in our metaphysics.

Second, NPH puts pressure on some authors and extant philosophical theories. The literature on Haecceitism and the Identity of Indiscernibles reveals a difference in number between the authors that believe that PII-O is not necessarily true and the

<sup>14</sup> For more on this, see Mackie (2006).

authors that endorse Haecceitism.<sup>15</sup> Although the majority of authors, in fact, seem to find counterexamples to PII-O strikingly convincing, Haecceitism seems still to be a position that few are willing to explicitly endorse. If NPH is sound, however, then all authors that believe PII-O to be possibly false are indeed committed to Haecceitism. The fact that at the moment this proportion is not met can easily be accounted for by noticing that many authors have explicitly worked on only one of these theses and, by not recognising the intimate connection between the two, didn't explicitly endorse a position on the latter based on their position on the former.

However, one can also find authors that have explicitly denied both PII-O and Haecceitism, therefore holding on to an overall inconsistent position. One such author is David Armstrong. In his *Universals and Scientific Realism, Vol. I*, Armstrong argues against the Bundle Theory on the basis of its commitment to PII-O (Armstrong 1978, ch. 9). He suggests that since PII-O is false, and since the Bundle Theory implies PII-O, then one must reject the Bundle Theory as being false too. His denial of PII-O should make Armstrong a Haecceitist. However, Armstrong himself (1989, pp. 57–61) specifically endorses a version of Anti-Haecceitism. Another such author is Thomas Hofweber, who flirts with Anti-Haecceitism despite remaining officially neutral about Haecceitism (Hofweber 2005, p. 27), and yet accepts that PII-O is not a necessary truth (Hofweber 2015, p. 476).

Furthermore, NPH puts pressure on some current philosophical theories, among which we find Generalism, as defended in Dasgupta (2009) and Turner (2016). According to Generalism, there are no primitive individuals. The structure of reality is instead taken to be fundamentally general. This is best explained in terms of qualitative properties. Reality, the Generalist argues, is exhausted by facts about the distribution of qualitative properties; facts about individuals are not required. Cowling (2022) argues that insofar as Haecceitism presupposes distinct maximal possibilities that only differ with respect to the identity of individuals (and those non-qualitative properties that this difference in identity entails), Generalism rules out Haecceitism. However, Dasgupta (2009, p. 49) argues that Generalism is compatible with PII-O being possibly false. But if so, Generalism turns out to be an inconsistent view.

Finally, NPH is an argument for Haecceitism, on the assumption that PII-O is not a necessary truth. At present, the main arguments for Haecceitism are all arguments from conceivability. Cowling (2022) suggests these arguments need two steps: a *conceivability step*, where it is argued that some scenario *S* is conceivable, and a *possibility step*, where it is argued that since *S* is conceivable, then *S* is possible. Therefore, Cowling (2022) remarks, there are multiple ways for the Anti-Haecceitist to challenge any of those arguments. I think NPH represents a novel strategy for the Haecceitist, and suggest that even though it still involves some form of conceivability (in the sense that almost all arguments against PII-O require some conceivability step), it is stronger than all other arguments presently at the Haecceitist's disposal. To see why this is the case, take one of the most influential argument for Haecceitism from the possibility of Max Black's (1952) scenario against PII-O. The argument, as reconstructed by Cowling (2022), is the following:

<sup>15</sup> On the Identity of Indiscernibles, see: Della Rocca (2005), French & Redhead (1988), Hawley (2009), and O'Leary-Hawthorne (1995). On Haecceitism, see: Cowling (2012), Kment (2012), Plantinga (1974), and Skow (2008).

- P1:** Black's (1952) universe, containing nothing more than two individual indiscernible spheres, is a genuine possibility.
- P2:** If Black's universe is a genuine possibility, then we can conceive of a world containing only two individual indiscernible spheres.
- P3:** If we can conceive of a world containing only two individual indiscernible spheres, then we can conceive of distinct worlds that differ only insofar as these spheres swap their qualitative role.
- P4:** If we can conceive of distinct worlds that differ only insofar as the relevant spheres swap their qualitative role, then these distinct worlds are possible.
- C:** Therefore, Haecceitism is true.

We can see that there are plenty of premises the Anti-Haecceitist can challenge. In particular, **P4** is very weak, for many would argue that conceivability is indeed not a good guide to possibility.<sup>16</sup> NPH, on the other hand, only needs **P1** to conclude that Haecceitism is true.

Clearly, the Anti-Haecceitist might yet argue against **P1**. However, notice that this strategy is going to affect NPH as well as the conceivability argument just presented. And any other strategy against the conceivability argument will not have any consequences for NPH. It is in this sense that I claim NPH is stronger than the common conceivability arguments for Haecceitism.

Furthermore, by establishing that if PII-O is not necessarily true then Haecceitism ensues, NPH also establishes that Anti-Haecceitism entails that PII-O is a necessary truth. And this, I suggest, doesn't look good for the Anti-Haecceitist. As I mentioned before, few authors remain which still endorse PII-O as a necessary truth, and if Anti-Haecceitism implies PII-O, then the same argument that Armstrong and others have used against the Bundle Theory can be used *mutatis mutandis* against Anti-Haecceitism.

I conclude by noting that although the denial of PII-O commits one to Haecceitism, it doesn't force them to accept *all* haecceitistically distinct possibilities. That is: one can deny PII-O and therefore endorse Haecceitism without being committed to possibilities like the one I described in the Introduction, where you and I swapped our qualitative role. In fact, holding that PII-O is not necessarily true entails a very weak version of Haecceitism, that is:

**Weak Haecceitism:** There are maximal possibilities that include all the same qualitative possibilities, and yet differ with respect to the non-qualitative possibilities they include, these last possibilities concerning only qualitatively indiscernible individuals.

And since the negation of the necessary truth of PII-O entails Weak Haecceitism, it entails Haecceitism *a fortiori*. However, it doesn't commit us to any possibilities in which two qualitatively discernible individuals, like you and me, swap their qualitative role.

<sup>16</sup> See Yablo (1993).

## 6 Conclusion

I have argued that the rejection of the Identity of Indiscernibles, understood as the thesis that no ordinary spatio-temporal object can agree with respect to all their qualitative properties, entails Haecceitism, according to which there are maximal possibilities that include all the same qualitative possibilities, and yet differ with respect to the non-qualitative possibilities they include. I argued that this is a strong result in favor of Haecceitism, for the majority of authors today find counterexamples to the Identity of Indiscernibles extremely convincing, and many philosophical positions have been and continue to be criticised on the basis of their commitment to the Identity of Indiscernibles. Also, I put some pressure on some authors and current philosophical accounts, by showing that they are holding on to inconsistent claims. Finally, since I take my argument to be independent from any particular account of possible worlds/possibilia, I take it to show that all these accounts must share a connection between the number of ordinary spatio-temporal objects within given possibilities and the number of overall possibilities.<sup>17</sup>

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<sup>17</sup> I thank Franz Berto, Aaron Cotnoir, Greg Restall and the members of the Arché Metaphysics & Logic Research Group for discussion on previous versions of this paper. I also thank two anonymous reviewers from this journal for their invaluable feedback. This work was generously supported by the Scottish Graduate School for Arts & Humanities (SGSAH) under research Grant no. AH/R012717/1, and the St Leonard's College European Doctoral Stipend Scholarship (St Andrews).

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